

SEQUENCE LISTING

<110> Gartenhaus, Ronald P.

<120> MCT-1, A Human Oncogene

<130> 209598.5002/30U1

<140> Not Yet Assigned

<141> 2000-11-10

<150> US 60/085,029

<151> 1998-05-11

<150> PCT/US99/10184

<151> 1999-05-10

<160> 10

<170> PatentIn Ver. 2.1

<210> 1

<211> 944

<212> DNA

<213> Homo sapiens

<220>

<223> Human cDNA

<400> 1

gctacacctca actgctgagg aaccgggtgc ctaaaaggag ccggcaaaag cgcc tacgtg 60  
gagtccagag gagc ggaagt agtc agattt gactgagagc cgtaaagcgc ggctggctct 120  
cg tttccgg ata acgacta cagctccgac tgtca gtgcc ggc ttccctc gtgtgagggg 180  
atctgccgga cccctgc aaa ttcaatttct ttccattcc gggcc ttccctc ctatcgtcgc 240  
ccccttc acc ttggatcatg ttcaaga at ttgatgaaa agaaaatgtg tccaactgca 300  
tccagttgaa aacttc agttt attaaggta ttaaga atca attgatagag caatttccag 360  
gtattgaacc atggcttaat caaatcatgc ctaagaaaga tcctgtcaaa atagtcgat 420  
gccatgaaca tatagaaatc cttac agttaa atggagaatt actctttt agacaaagag 480  
aagg gcctt ttatcca acc cta agattac ttca cacaata tcctttt atc ctgcc acacc 540  
acgagg ttaaaggagcc atcaaattt tactc agtgg agc acaat atc atgtgtccca 600  
ggcttaactt ctcctggagc taagcttac cctgctgcag tagat accat ttttgc ttttgc 660  
atggcagaag gaaaacagca tgctctatgt gttggagtca tgaagatgtc tgcagaagac 720  
attgagaaag tcaacaagg aattggcatt gaaaat atcc attat taaa tttatggctg 780  
tggcatatga agacataaa atgagcctca gaaggaatgc acttgggcta aat atggata 840  
tttgctgtta tctgtgtttg ttttgc ttttgc tgacagcatg aagataatgc ctgtggttat 900  
gctgaataaa ttcaccat gctaaaaaaa aaaaaaaaaaaa aaaa 944

<210> 2  
<211> 121  
<212> PRT  
<213> Homo sapiens

<220>  
<223> Putative sequence of protein encoded by human cDNA  
of SEQ ID NO: 1

<400> 2

Met	Phe	Lys	Lys	Phe	Asp	Glu	Lys	Asn	Val	Ser	Asn	Cys	Ile	Gln
1				5					10				15	

Leu Lys Thr Ser Val Ile Lys Gly Ile Lys Asn Gln Leu Ile Glu Gln  
20 25 30

Phe Pro Gly Ile Glu Pro Trp Leu Asn Gln Ile Met Pro Lys Lys Asp  
35 40 45

Pro Val Lys Ile Val Arg Cys His Glu His Ile Glu Ile Leu Thr Val  
50 55 60

Asn Gly Glu Leu Leu Phe Phe Arg Gln Arg Glu Gly Pro Phe Tyr Pro  
65 70 75 80

Thr Leu Arg Leu Leu His Lys Tyr Pro Phe Ile Leu Pro His Gln Gln  
85 90 95

Val Asp Lys Gly Ala Ile Lys Phe Val Leu Ser Gly Ala Asn Ile Met  
100 105 110

Cys Pro Arg Leu Asn Phe Ser Trp Ser  
115 120

<210> 3  
<211> 25  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Primer HUT 78F

<400> 3  
cattggagac cgctacacac aggac 25

<210> 4

<211> 24  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Description of Artificial Sequence: Primer HuT 78R  
  
<400> 4  
ctgtcaaaat agtccgatgc cacg

24

<210> 5  
<211> 24  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Description of Artificial Sequence: pCMV-MCT-1  
Generation Primer (+)  
  
<400> 5  
gctgaggatc cggttcgccta aaag

24

<210> 6  
<211> 23  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Description of Artificial Sequence: pCMV-MCT-1  
Generation Primer (-)  
  
<400> 6  
tctggtaat tcattcagca taa

23

<210> 7  
<211> 943  
<212> DNA  
<213> Homo sapiens  
  
<220>  
<223> cDNA encoding MCT-1  
  
<400> 7  
gctacacctcca actgctgagg aaccgggtgc ctaaaaaggag ccggcaaaag cgcc tacgtg 60  
gagtccagag gagc gaga gt agtc agat tt gactgagagc cgtaaagcgc ggctggctct 120

cgttttccgg ataacgacta cagctccgac tgtcaagtgcc ggccttcctc gtgtgagggg 180  
atctgccgga cccctgc当地 ttcaatttct ttcccatc gggcccttcc ctatcgtcgc 240  
ccccttcacc ttggatcatg ttcaagaat ttgatgaaaa agaaaatgtg tccaactgca 300  
tccagtgaa aacttcagtt attaaggta ttaagaatca attgataagag caatttccag 360  
gtattgaacc atggcttaat caaatcatgc ctaagaaaaga tcctgtcaaa atagtccat 420  
gccatgaaca tatagaaatc cttacagtaa atggagaatt actcttttt agacaaagag 480  
aaggcctt ttatccaacc ctaagattac ttcacaaata tcctttatc ctgccacacc 540  
agcaggttga taaaggagcc atcaaatttgc tactcagtgg agcaaatac atgtgtccag 600  
gcttaacttc tcctggagct aagcttacc ctgctgcagt agataccatt gttgctatca 660  
tggcagaagg aaaacagcat gctctatgtg ttggagtcat gaagatgtct gcagaagaca 720  
ttgagaaagt caacaaagga attggcatg aaaatatcca ttattnaat gatggctgt 780  
ggcatatgaa gacatataaa tgagcctcag aaggaatgca cttggctaa atatggat 840  
tgtgctgtat ctgtgttgt gtctgtgt gacagcatga agataatgcc tgtggatgt 900  
ctgaataaat tcaccagatg ctaaaaaaaaaaaaaaaa aaa 943

<210> 8

<211> 181

<212> PRT

<213> Homo sapiens

<220>

<223> MCT-1 Protein

<400> 8

Met Phe Lys Lys Phe Asp Glu Lys Glu Asn Val Ser Asn Cys Ile Gln  
1 5 10 15

Leu Lys Thr Ser Val Ile Lys Gly Ile Lys Asn Gln Leu Ile Glu Gln  
20 25 30

Phe Pro Gly Ile Glu Pro Trp Leu Asn Gln Ile Met Pro Lys Lys Asp  
35 40 45

Pro Val Lys Ile Val Arg Cys His Glu His Ile Glu Ile Leu Thr Val  
50 55 60

Asn Gly Glu Leu Leu Phe Phe Arg Gln Arg Glu Gly Pro Phe Tyr Pro  
65 70 75 80

Thr Leu Arg Leu Leu His Lys Tyr Pro Phe Ile Leu Pro His Gln Gln  
85 90 95

Val Asp Lys Gly Ala Ile Lys Phe Val Leu Ser Gly Ala Asn Ile Met  
100 105 110

Cys Pro Gly Leu Thr Ser Pro Gly Ala Lys Leu Tyr Pro Ala Ala Val  
115 120 125

Asp Thr Ile Val Ala Ile Met Ala Glu Gly Lys Gln His Ala Leu Cys  
130                    135                    140

Val Gly Val Met Lys Met Ser Ala Glu Asp Ile Glu Lys Val Asn Lys  
145                    150                    155                    160

Gly Ile Gly Ile Glu Asn Ile His Tyr Leu Asn Asp Gly Leu Trp His  
165                    170                    175

Met Lys Thr Tyr Lys  
180

<210> 9

<211> 58

<212> PRT

<213> Homo sapiens

<220>

<223> Portion of MCT-1 protein sequence for comparison  
with Cyclin H protein sequence

<400> 9

Lys Glu Asn Val Ser Asn Cys Ile Gln Leu Lys Thr Ser Val Ile Lys  
1                    5                    10                    15

Gly Ile Lys Asn Gln Leu Ile Glu Gln Phe Pro Gly Ile Glu Pro Trp  
20                    25                    30

Leu Asn Gln Ile Met Pro Lys Lys Asp Pro Val Lys Ile Val Arg Cys  
35                    40                    45

His Glu His Ile Glu Ile Leu Thr Val Asn  
50                    55

<210> 10

<211> 50

<212> PRT

<213> Homo sapiens

<220>

<223> Portion of Cyclin H protein sequence for  
comparison with MCT-1 protein sequence

<400> 10

Lys Glu Asn Arg Thr Cys Leu Ser Gln Leu Leu Asp Ile Met Lys Ser

1

5

10

15

Met Arg Asn Leu Val Lys Lys Tyr Glu Pro Pro Arg Ser Glu Glu Val  
20 25 30

Ala Val Leu Lys Gln Lys Leu Glu Arg Cys His Ser Ala Glu Leu Ala  
35 40 45

Leu Asn  
50